

Response to Comments Received During Public Notice Period

RESPONSIVENESS SUMMARY FOR PROPOSED AIR QUALITY CONTROL PERMIT No. 1000107 APS - YUCCA POWER PLANT DECEMBER 17, 1998 PROPOSED PERMIT ISSUES

The following comments were submitted by APS through their letter dated December 17, 1998, during the public notice period (November 27, 1998 through December 27, 1998).

Attachment "A" Comments

Comment 1: Since the initial draft of Yucca's Title V permit, ADEQ revised the Attachment A to the permit. To facilitate and expedite the permit review and approval cycle, I developed a redlined Attachment A, which is largely identical to the edited version of Attachment A from the Cholla Power Plant proposed permit (permit # 1000108) and the Fairview Generating Station proposed permit (permit # 1000149). The redlined version of the Yucca Permit Attachment A details specific changes we believe should be made to the attachment. This redlined version is included as an attachment to this letter. For further clarification, we refer you to the detailed explanation of these proposed modifications that was submitted as part of our comments on the Cholla permit.

Response: Per comment, all required modifications have been made to the permit.

Attachment "B" Comments

Comment 2: I.C.4.a. On the fourth line replace "adequate facilities" with "adequate facilities".

Response: Per comment, necessary change has been made.

Comment 3: I.D.2, 3 & 4. The attempted application of the particulate matter emissions limitation for unclassified sources to the cooling towers is legally incorrect. This error stems from the failure to recognize and give effect to the definition of "stationary source" contained in R18-2-101.104 and the clear language contained in R18-2-730.A. The term "stationary source" is defined in R18-2-101.104 as follows:

"Stationary source" means any building, structure, facility or installation subject to regulation pursuant to A.R.S. § 49-426(A) which emits or may emit any air pollutant. "Building", "structure", "facility", or "installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person or persons under common control. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" as described in the "Standard Industrial Classification Manual, 1987". [Emphasis added.]

The Yucca Power Plant, which consists of an oil/gas-fired steam generating unit, five combustion turbines, and auxiliary equipment necessary to generate electricity (including the cooling tower), is classified in Major Group 49 in the Standard Industrial Classification Manual. The cooling tower is an integral part of the electricity-generating equipment. The steam generator simply cannot operate independently of the cooling tower. They are part of the same operation.

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Therefore, the pollutant emitting activity relating to the cooling tower is subject to the standards of performance for existing fossil-fuel fired steam generators (R18-2-703) because it is part of the stationary source. (Because the referenced standards do not specify an opacity standard for cooling towers, the 40% opacity limitation established in R18-2-702.B applies to them.)

By its own terms, R18-2-730.A applies only to an existing source which is not otherwise subject to standards of performance under Articles 7, 9 or 11 of ADEQ's regulations on air quality. Therefore, this section does not apply to the cooling tower, even though the standards of performance applicable to the source do not specify a particulate emission limitation for the cooling tower.

If it had been the intent of the agency, in adopting R18-2-730, to apply the regulation to a source whenever a particular pollutant is not addressed by applicable standards of performance, the agency easily could have done so. For example, R18-2-702, which is a pollutant-specific regulation, clearly shows that the agency knew how to draft a regulation imposing an emission limit for a pollutant not addressed by applicable standards of performance. R18-2-730 is not such a regulation.

ADEQ has already determined that the above reasoning is correct. In 1992, ADEQ issued a draft installation permit to the APS Cholla Power Plant for the flyash silo baghouse. The draft permit contained the requirement to comply with R18-2-730 (R18-2-530 at that time) and to install sampling ports and platforms for performance tests. APS submitted comments on the draft permit similar to those contained in these comments. After consideration, the Agency deleted all references to the R18-2-730 requirements and stack sampling facilities and included only the generic 40% opacity requirement and the requirement to install the baghouse in compliance with 40 C.F.R. § 60.11(d). ADEQ must follow that precedent and do the same in this Title V permit.

Moreover, the particulate matter standard does not apply because cooling towers are not process sources. The particulate matter standard of R18-2-730.A.1 applies to "any unclassified process source." The term "process source" means "the last operation or process which produces an air contaminant resulting from either: a) The separation of the air contaminants from the process material, or b) The conversion of constituents of the process materials into air contaminants which is not an air pollution abatement operation." R18-2-701.22. Process sources generally are understood to formulate raw materials into a finished product. Cooling towers merely cool water, they do not process the water into the product of the plant—electricity. Water and associated treatment chemicals cannot reasonably be considered "process materials" and, thus, the cooling tower cannot reasonably be considered a "process source."

Finally, there is no reasonable method accurately to measure particulate emissions from cooling towers. Because there is no reasonable means to measure particulate emissions, including a particulate matter limit in the permit would be meaningless. ADEQ should eliminate from the permit all references to R18-2-730 as an applicable requirement for the cooling towers.

Response: A.A.C. R18-2-702(A) states that the provisions of Article 7 apply only to existing sources. Existing source is defined under A.A.C. R18-2-101.38 as any source which does not have an applicable new source performance standard under Article 9. New source performance standards apply to any stationary source which contains an affected facility that is constructed or modified after the date

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of publication in 40 CFR 60 of any standard applicable to that facility. Stationary source is defined as any building, structure, facility, or installation which emits or may emit any air pollutant.

APS's argument is flawed in the sense that it has interpreted the definition of stationary source from Title V and NSR/PSD permitting standpoint rather than using the definition of stationary source given under NSPS regulations. It has been the Department's understanding thus far that Article 7 provisions have been based along the lines of 40 CFR 60 and hence the same definition of stationary source would apply. ADEQ had meetings with representatives from APS, TEP, SRP, AEPCO, and CLC and their attorneys on March 4, 1999, and March 24, 1999 to discuss the applicability of R18-2-730. It was agreed upon that R18-2-730 was applicable to an emission unit such as a flyash silo or a cooling tower. ADEQ agreed, however, that it is infeasible to test cooling towers to demonstrate compliance with the particulate matter standard and hence has not required testing in the permit. Statement to this effect has been incorporated in the technical remarks document.

Comment 4: I.E.1.b.(1). The proposed permit lists reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne during certain operations. The corresponding referenced rule identifies landscaping as an optional precaution; however, this option is omitted in the proposed permit. The option to use landscaping as a measure to control particulate matter should be added to the permit.

This section also lists covering as an optional precaution. We would like clarification as to whether the use of gravel is an acceptable covering to control excessive amounts of particulate matter from becoming airborne.

Response: Per comment, "landscaping" has been added to the permit term. Graveling is considered an acceptable covering to control excessive amounts of particulate matter from becoming airborne.

Comment 5: I.E.1.b.(2). The proposed permit states: "Use approved dust suppressants, adhesive soil stabilizer, or paving on, or bar access to driveways, parking areas, and vacant lots where motor vehicular activity occurs;"

We believe this requirement is taken out of context from the cited regulatory reference. A.A.C. R18-2-604.B states: "No person shall cause, suffer, allow, or permit a vacant lot, or urban or suburban open area..." Accordingly, the references to driveways and parking lots should be removed from this section of the proposed permit.

Response: Additional citation to A.A.C. R18-2-604.A has been provided. This comment does not result in any language change.

Comment 6: I.F.4.a. The fourth line of this provision includes the phrase "vehicles, or are agricultural..." The word "are" should be deleted to make the provision grammatically correct and consistent with the regulations.

Response: Suggested change has been made.

Comment 7: II.D.2.a. Some of the fuel oil currently at the Yucca Plant has been on site for a number of years. The information required by this permit condition, therefore, is not available for this oil. To clarify that this requirement is not required to be retroactive, we suggest that this provision be

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modified as suggested below.

The proposed permit condition also requires APS to maintain a record of the contractual agreement with the fuel oil vendor. However, APS purchases fuel oil through the pipeline system and uses the pipeline specification, rather than a contractual agreement, to purchase fuel oil. Items 2 through 7 under II.D.2.a, are identified on the fuel oil purchase specification sheet. Therefore, it is more appropriate to require the maintenance of the specification data than a non-existent contractual agreement. APS requests that this provision be modified to read: “Permittees shall keep on record at the site the purchase specification or other documentation indicating the following information concerning the liquid fuel being fired for each shipment of fuel oil received during the permit term.”

Additionally, this section requires recalculating emissions for any change in item (2), (4), or (5); with item (4) being the fuel oil ash content. However, the listed equation to perform the emissions calculation does not factor in the ash content. Please describe how this equation reflects changes in emissions resulting in changes in the fuel oil ash content. Alternatively, delete the requirement to recalculate emissions when the ash content changes.

Response: Suggested changes have been made. Regarding emission calculations, reference should have been made to density in place of ash content. This error has been rectified.

Comment 8: *II.E.2. This provision raises the same issues as II.D.2.a. Please modify this provision accordingly.*

Response: Please see our response to Comment No. 7.

Comment 9: *II.E.3(b)(1). This provision raises the same issues as II.D.2.a. Please modify this provision accordingly.*

Response: Please see our response to Comment No. 7.

Comment 10: *II.E.4.a & b. It is our understanding that ADEQ intends that no more than one performance test be required for each unit during the permit term. The predominant reason for requiring a performance test of equipment not subject to an emission limit is to ensure that ADEQ’s emission inventory is accurate. Because factors that may affect emissions do not frequently change, and any repeated performance test would most likely result in substantially the same outcome, multiple tests would not add to the accuracy of that inventory. ADEQ’s Responsiveness Summary appears to support this conclusion, stating: “It has been ADEQ’s consistent policy to test units for pollutants with no emission standards that are emitted in major quantities one [sic] in the term of the permit provided the units by the [sic] virtue of their operation cross the ‘major’ threshold level.” (Response to Comment 4) This understanding is not clear in the proposed permit condition, however. We suggest that the following language be added to each of these provisions: “No more than one performance test will be required for each turbine during the permit term.”*

Response: ADEQ agrees with APS-Yucca in that it will not require more than one performance test to be performed on any unit during the permit term. This comment does not result in any change.

Comment 11: *II.E.6.b. This provision requires the permittee to “report the status of the testing requirements.”*

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It is not clear to us what ADEQ intends by this quoted language. The testing requirements and, thus, their status, do not change without a permit revision. We assume that ADEQ intends that the Plant submit regular updates of the hours of operation of the turbines on a twelve month rolling basis to monitor whether the testing thresholds in II.E.4 are triggered. If so, we suggest the following amendment to this provision: "Until a performance test pursuant to Section III.B of this attachment is completed, Permittee shall submit with each compliance certification a report of the hours of operation of each combustion turbine on a twelve month rolling basis."

Response: As is evident from the comment, APS-Yucca has correctly interpreted Condition II.E.6.b. of Attachment "B". This comment does not result in any change.

Comment 12: *II.F.2. This provision raises the same issues as II.D.2.a. Please modify this provision accordingly.*

Response: Please see our response to Comment 7.

Comment 13: *II.F.3.a. This provision raises the same issues as II.D.2.a. Please modify this provision accordingly.*

Response: Please see our response to Comment 7.

Comment 14: *II.H.2.a. The proposed permit states "the Permittee shall log in ink or in an electronic format..." One of the items required to be logged in ink or in an electronic format are the Material Safety Data Sheets. Since not all MSDS are maintained electronically, the permit should be reworded to state: "Each time a spray painting project is conducted, the Permittee shall maintain an MSDS for all paints and solvents used and log in ink or in an electronic format a record of the following:" Provision II.H.2.a.4 should then be deleted.*

Response: Suggested changes have been made.

Comment 15: *II.D.3. The proposed permit states "Permittee shall keep a record of all emission related maintenance activities performed on Permittee's mobile sources stationed at the facility as per manufacturer's specifications." APS requests clarification regarding what constitutes an "emission related maintenance activity." Read broadly, this term could apply to virtually any maintenance on a vehicle because almost all maintenance has at least a tangential impact on emissions (e.g., maintaining air pressure in tires, replacing washer fluid). Does ADEQ intend that this provision cover only maintenance to emission control equipment, or is it more than that?*

Response: ADEQ requests APS-Yucca to adopt a more commonsensical approach to this issue. While almost anything could be stretched to tangentially impact emissions, we suggest that recordkeeping be limited to those maintenance activities that have a direct impact on the emissions. This includes but is not limited to maintenance of emission control equipment.

Attachment "C" Comments

Comment 16: *Applicable Requirements. To make this list complete, we believe the following requirements should also be listed as applicable requirements:*

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R18-2-802

Off-Road Machinery

R18-2-804

Roadway and Site Cleaning Machinery

Response: It has been found by the Department that R18-2-802 does not belong in an air quality control permit because it applies to tailpipe emissions. R18-2-804 has been added to Attachment "C".

Attachment "E" Comments

Comment 17: *The final three items on the list of insignificant activities (numbered 76, 77, and 78) contain a parenthetical limitation that states: "limited to chemicals not listed in 40 CFR 68.13, chemicals listed in 40 CFR 68.13 but not stored in quantities less than threshold levels, and not subject to any applicable regulation under the Act or the Arizona Revised Rules." The second appearance of the word "not" (underlined above) should be deleted to make the statement consistent with 40 CFR 68.*

Response: Suggested change has been made.

Technical Review Document Comments

Comment 18: *Page 2, 1st paragraph: Amend the fourth line to read "Data from the emission sources forms show that Yucca potentially emits more than 100 tons per year" It is not true that the plant's actual emissions for all primary criteria pollutants exceed 100 tpy.*

Response: Suggested change has been made.

Comment 19: *Page 2, Table 2: The alternate operating scenarios for combustion turbines 4 and 21 are operation on natural gas or co-firing natural gas and #2 Fuel Oil.*

Response: Suggested change has been made.

Comment 20: *Page 8, Table 7: The "Verification" column for Steam Unit 1 states that the SO_x standard is 0.8 lb/MMBtu. The correct standard is 1.0 lb/MMBtu.*

Response: Suggested change has been made.

Comment 21: *Page 14, 1st partial paragraph, last sentence: delete the clause "as an emission limitation."*

Response: Suggested change has been made.